

Global Grid Product Area Directorate

Global Grid PAD

New Horizons Symposium

13-14 November 1997

Presented By:

Mr. Joe Mardo

Director

ESC/DIG

(781) 377-6968

Outline

Global Grid PAD

- ◆ Mission
- ◆ Organization
- ◆ Programs
 - Description
 - Existing Contracts
 - Future needs/trends
- ◆ Global Grid PAD Goals

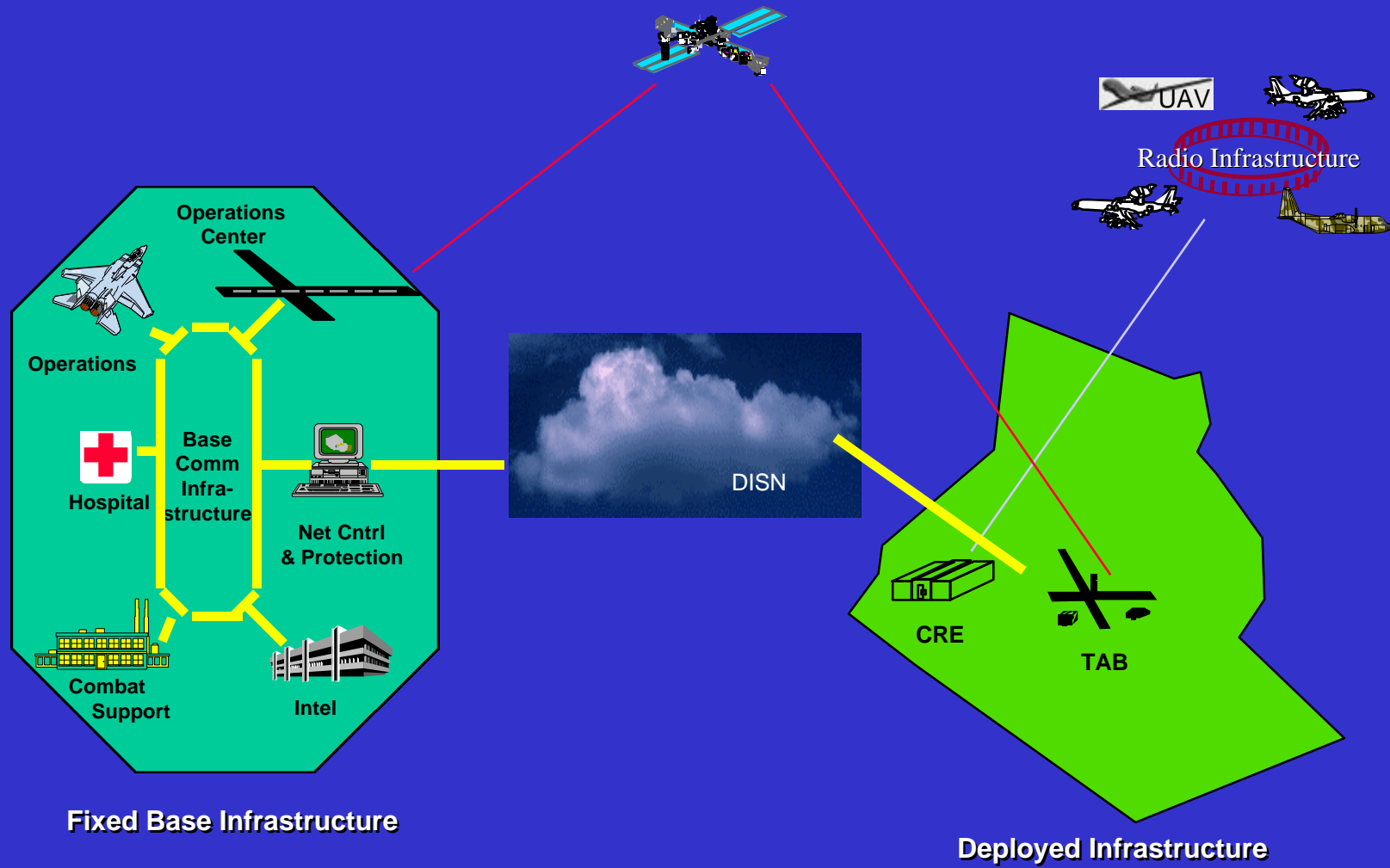
Global Grid PAD Mission Statement

Global Grid PAD

“To provide common Defense Information Infrastructure compliant products and services to seamlessly mesh Air Force warfighters and Joint coalition partners over the global grid”

Global Grid Scope

Global Grid PAD



GLOBAL GRID PAD

ESC/DIG

FUNCTIONAL POCS

ENGINEERING

Mr H. Gong, Mitre x6912

FINANCIAL MGT

Mr C. Murphy, x7518

CONTRACTS

Mr T. Wooldridge, x6579

Director	Mr Joe Mardo	x6968
Deputy	Lt Col M. Urban	x7991
Deputy (SSG)	Lt Col M. Hartley	x1840
Exec	Lt Ted Shoepe	x7456
Secy	Ms Gwen Scott	x5190

DIGO

OPERATIONS

Maj D. Thomas
x7342

Global Grid Infrastructure
POM Support
Office Management

DIGR

RADIO PRODUCT GROUP

Mr J. McIntosh
x7992

- PACER SPEAK
- Single Channel Ground and Airborne Radio System (SINCGARS)
- HAVE QUICK
- Scope Shield
- Multi-mission Advanced Tactical Terminal (MATT)
- Joint Tactical Information Distribution System (JTIDS)
- JTIDS FMS
- Programmable Multimode Communications System

DIGC

FIXED INFRASTRUCTURE

Lt Col D. Genovese
x1024

- Combat Info Transport System (CITS)
- Information Transport System (ITS)
- Network Management System (NMS)/Base
- Information Protection (BIP)
- Voice Switch System (VSS)
- Telecom Mgt System (TMS)

DIGD

DEPLOYED INFRASTRUCTURE

Ms J. Wandrei
x7965

- Lightweight Multiband Satellite Terminal (LMST)
- Integrated Communications Access Packages (ICAP)
- Stand Alone Message Processing System (STAMPS)
- Tactical Network Analysis and Planning System (TNAPS)

SSG DIG

GG PAD - SSG

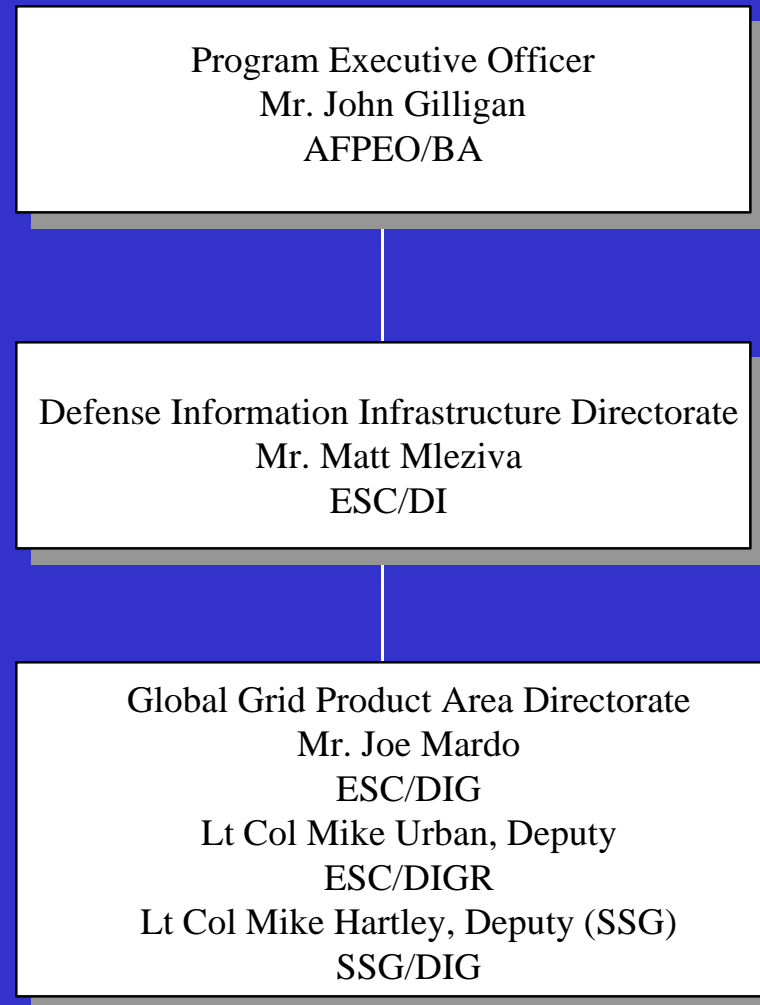
Maj J. Kanski x5205
Maj J. McIntosh x5623
L/C M. Quinn x1045

- Air Force Systems Networking (AFSN)
- Record Comm
- Standard Automated Remote to Autodin Host (SARAH)
- Message Distribution Terminal (MDT)
- Defense Message System (DMS)

Note: ESC phone prefix: (781) 377-XXXX
SSG phone prefix: (334) 416-XXXX

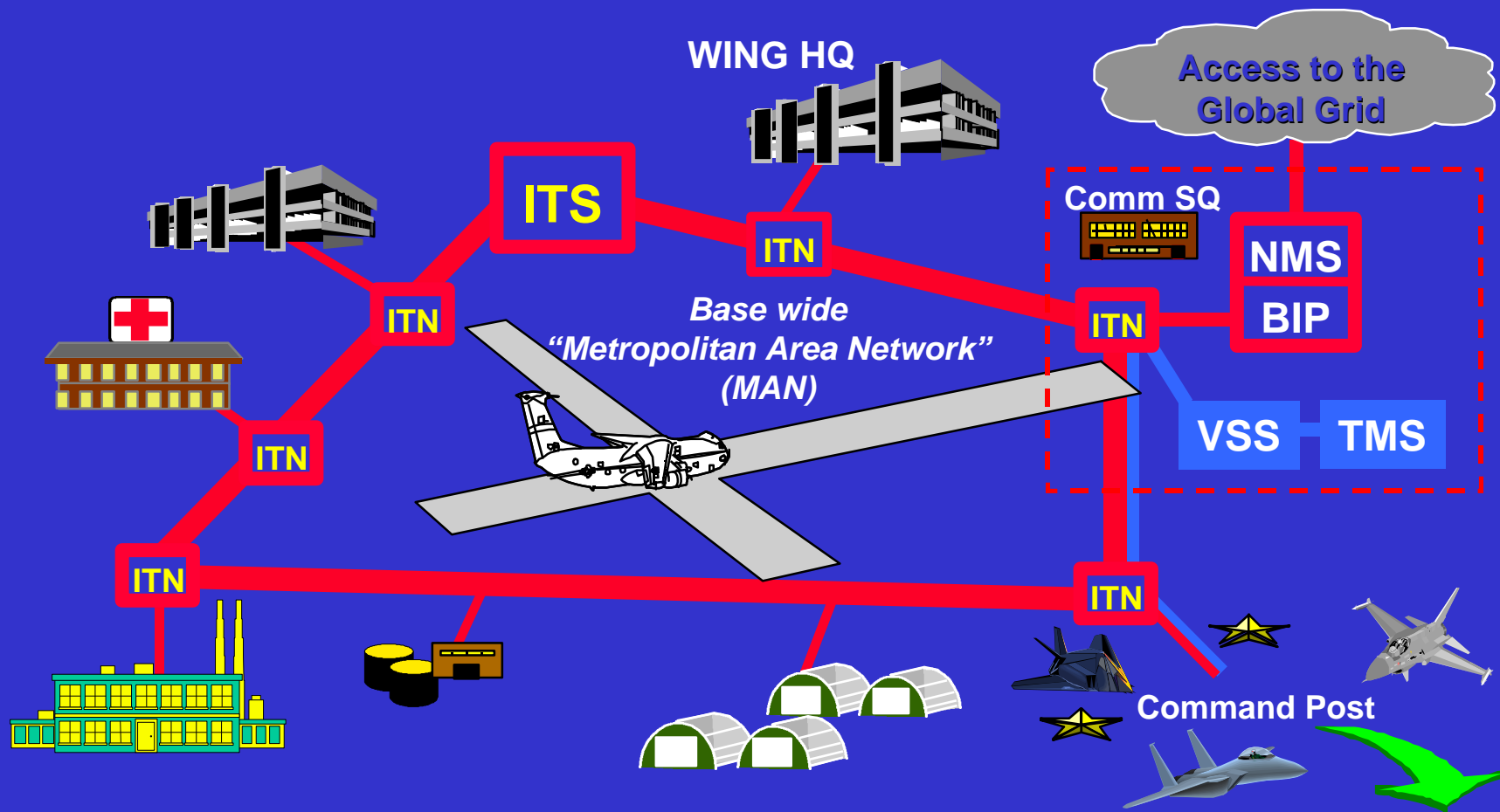
Global Grid PAD's Chain of Command

Global Grid PAD



Combat Information Transport System (CITS)

Global Grid PAD



- Infrastructure program provides the Information Transport System (ITS) - Fiber Backbone; Integrated Network Management and Base Information Protection (NMS/BIP) and Voice Switch System (VSS) and Telecommunication Management System (TMS) at selected locations.

Existing Contracts

Global Grid PAD

◆ Telephone Management System

- Contract #F11624-95-D-0005
- Contractor: ANSTEC, Inc
- Issuing office: ESC/DIGC
- Type vehicle: ID/IQ
- Products/Services
 - Telecom Management Systems
 - Contractor Logistics Support
- Estimated total value \$47.5M

Existing Contracts (Cont.)

Global Grid PAD

- ◆ Remote Distribution System (supports 38EIW design and installation of ITS subsystems)
 - Contract #s F11624-95-D-0001,2,3 &4 (separate regional contracts)
 - Contractor: GTE
 - Issuing office: 38 EIW
 - Type vehicle: Requirements
 - Products/services: Design/install of CONUS base level distribution system, engineering services, logistics support
 - Estimated total value: \$155M

Existing Contracts (Cont.)

Global Grid PAD

- ◆ Worldwide Integrated Digital Telecommunications System (WIDTS, supports VSS)
 - ◆ Contract# F04606-97-D-0059
 - ◆ Contractor: GTE
 - ◆ Issuing office: SM-ALC/LH
 - ◆ Type vehicle: ID/IQ
 - ◆ Products/services: Telephone switch components and upgrades
 - Depot support
 - Estimated total value: \$536M

Existing Contracts (Cont.)

Global Grid PAD

- ◆ ULANA II (supports NMS/BIP implementation)
 - Contract#s F34608-94-D-0011
F01620-97-D-0003
 - Contractors: EDS and TRW
 - Issuing office: SSG
 - Type vehicle: ID/IQ
 - Products/services:
 - Information Transmission HW & SW
 - Engineering and Support Services
 - Estimated total values: \$580M (EDS)
\$633M (TRW)

Future Needs

Global Grid PAD

◆ Technology Areas

- High bandwidth information transport technologies
 - LAN, WAN and MAN products
- Information Protection
 - Products that enhance current information Protection capabilities and mitigate new information warfare threats

◆ Anticipated Acquisition Approach: Acquire all products services via existing contracts (ULANA II, GSA, etc)

Budgeted CITS Investment FY98-04 (\$M)

Global Grid PAD

ITS	\$ 586.4
NMS/BIP	\$ 142.8
VSS	\$ 69.2
TMS	\$ 25.3
TOTAL	\$ 823.7

Lightweight Multiband Satellite Terminal (LMST)

Global Grid PAD



- Deployable satellite terminal operating in X, Ku and C-bands
Used by ACC, AMC, AFSOC, PACAF and USAFE

Existing Contract

Global Grid PAD

◆ LMST Production

- Contract# DAAB0795CA518
- Contractor: Harris
- Issuing office: CECOM
- Type vehicle: FFP with priced options
- Products/services: 10 terminals and support
- Current value: \$20M
- Estimated total value: \$55M (up to 55 additional systems)

Future Needs

Global Grid PAD

- ◆ Implement family of transit case tri-band terminals for deployed AF operations
 - 2.4 m redundant systems
 - 2.4 m non-redundant systems
 - 1.8 m non-redundant systems
- ◆ Anticipated Acquisition Approach: Competitive
- ◆ Estimated program value: \$25M (pending congressional action, plus new funding actions)

Integrated Communications Access Packages (ICAP)

Global Grid PAD



- Modular communications equipment providing voice, data and messaging services for deployed Air Force operations. Modules include access, multiplexing, switching, COMSEC, on-base transmission and network management capabilities.

Used by ACC, AMC, AFSOC, PACAF and USAFE

Existing Contract

Global Grid PAD

◆ ICAP Production

- Contract# F19628-96-D-0066
- Contractor: Motorola
- Issuing office: ESC/DIGD
- Type vehicle: FFP, ID/IQ
- Products/services: 13 systems, training and logistics support
- Current value: \$52M
- Estimated total value: \$264M (up to 140 systems)

Future Needs

Global Grid PAD

- ◆ Harmonize fixed and deployed architectures and technical solutions
 - Candidates:
 - Standardize network management tools
 - Defense Message System (DMS) insertion
 - Asynchronous Transfer Mode (ATM) upgrade
- ◆ Insert evolving commercial technology to
 - Increase flexibility and capacity
 - Reduce airlift and manpower
- ◆ Anticipated Acquisition Approach: Add to existing contract
- ◆ Estimated program value: \$50M

Programmable Modular Communication System (PMCS)

Global Grid PAD



An open architecture family of programmable radios providing multi-band, multi-mode, voice and data communications

Programmable Multi-mode Communications Systems (PMCS) - ACAT ID

Global Grid PAD

◆ Organization:

- US Army: Service Lead
- Joint Program Office (WASH): AF Lead
 - Reports to C3I Over-Arching IPT
 - Responsible for System Architecture, Interface Definition, Budget, Schedules, Acquisition Plans
- DARPA - Responsible for Architecture and technology insertion
- Services - Responsible for development and service unique production

Future Needs

Global Grid PAD

- ◆ AF Requirements
 - Global Access, Navigation and Safety (Long Term)
8.33Khz, DAMA, Oceanic DL, ATC DL
 - IBS Receiver
 - Link 16 to VMF Gateway
 - UHF SATCOM DAMA
- ◆ Anticipated Acquisition Approach: Multiple Competitive Contracts
- ◆ Estimated program value: TBD

Additional Opportunities - Fielded Programs

Global Grid PAD

- ◆ Pacer Speak - Rack mounted UHF/VHF/HF radios for USAF TACPs - Hughes (\$20M est.)
 - Anticipate additional 175-200 Units
 - Enhance ANG Units with EPLRS (Enhanced Position Location Reporting System) and SADL (Situation Awareness Data Link)
- ◆ SINCGARS - Jam resistant secure VHF for the cockpit Hughes (\$10M est. FY99)
 - 8.33khz Upgrade Kits (design and production) for European ATC compatibility

Global Grid PAD Goals

Global Grid PAD

◆Near Term

- Integrate infrastructure programs
 - Eliminate duplicate and competing solutions
 - Move toward common solutions and technology
 - Ensure infrastructure programs will support fielding of C2 AIS's
- Pursue new paradigm for managing infrastructure programs
 - Infrastructure centric versus program centric
 - Ensure workstation -to- workstation connectivity
 - Balance investment across programs; fill in holes

◆Long Term

- Define 2005 Air Force Global Grid Architecture
 - Consistent with C2 Target Architecture
- Define road-map to migrate current program to 2005 architecture

Summary

Global Grid PAD

- ◆ New Organization (GG PAD) integrates Hanscom, Gunter (SSG), and Tinker (38th EIW) Comm Infrastructure Activities
- ◆ Substantial new business opportunities
 - Upgrades to existing programs
- ◆ Major PAD focus to:
 - Integrate programs
 - Define an Infrastructure Centric management process
 - Make information available anywhere, anytime

Future Needs

Global Grid PAD

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